

EDITORIAL INDEX

1991

Need information on a particular product or service? Try using this comprehensive index to find what you need. This fully cross-referenced index contains all the products and services published between DECEMBER 1990 AND NOVEMBER 1991. By using the alphabetical listing to locate a product or service you require, you will be directed to the relevant issue and page number.

A

AC/DC power supply Nov., pg 19
Adapters - microwave communications
Apr., pg 19
Air cylinders Apr., pg 21
Air-powered dispenser Aug., pg 18
Acoustic analysis Feb., pg 6
Actuators - linear May, pg 43
Actuator - linear June, pg 20
Actuators - misc Feb., pg 20
Actuator - rotary Apr., pg 21
Actuator - rotary May, pg 10
Alignment system Aug., pg 29
Alternative power for vehicles
Oct., pg 10
Alternator Sept., pg 26
Amplifiers - stainless steel, air
Jan., pg 15
Analyzer - moisture Nov., pg 20
Antenna technology May, pg 7
Artificial intelligence - research award
to BC company Sept., pg 8
Automation controller Aug., pg 17
Award - Candu nuclear reactor
Jan., pg 15
Awards - die casting Apr., pg 18
Axial rotors and fans May, pg 40

B

Back shells - to use with interface connectors Mar., pg 111
Battery charger Apr., pg 19
Bearings - selecting bearings for electric motors May, pg 20
Bellow suction cups Sept., pg 23
Blowers Sept., pg 23
Bolts - bogus bolt suppliers Apr., pg 10
Brackets - mounting May, pg 38
Brakes and clutches Feb., pg 16
Business briefs Jan., pg 15
Business briefs Feb., pg 8

C

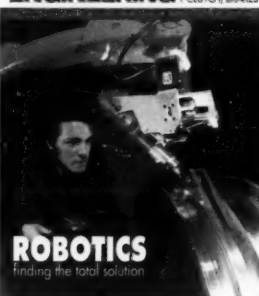
CAD/CAM - AutoSim - computer language for developing simulation models Jan., pg 14
CAD/CAM - converting drawings to CAD Mar., pg 6
CAD/CAM - computer documentation
Sept., pg 10
CAD/CAM - computers electronically pre-assemble airplanes June, pg 6
CAD/CAM - Fibre optic X station
Mar., pg 6
CAD Peripherals Jan., pg 12
CAD/CAM - HP PA-RISC-based workstation Apr., pg 7
CAD/CAM - integrating areas, dynamic and acoustic analysis Feb., pg 6
CAD/CAM - laptops Mar., pg 6
CAD/CAM - mainframe stability (Arche Legacy Series) Aug., pg 6
CAD/CAM - monitors Apr., pg 7
CAD/CAM - new monitor from Apple
Aug., pg 6
CAD/CAM - memory boards May, pg 8
CAD/CAM - notebook computers
Sept., pg 10
CAD/CAM - addressing UNIX, MIPS and RISC June, pg 17
CAD/CAM - PCs have wide application base June, pg 6

DESIGN ENGINEERING



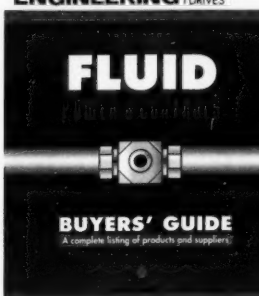
CAD/CAM - PC monitor for statistical control June, pg 6
CAD/CAM - ProServe 3.0 backup software for Novell LANs May, pg 8
CAD/CAM - SUN introduces SPARC desktop computer series
Dec. 1990, pg 8
CAD/CAM - touch screen driver
CAD/CAM b Software logic
Mar., pg 6
CAD/CAM - touch screen driver
Sept., pg 10
CAD/CAM - 3D Modeling May, pg 6
CAD/CAM - 3D Modeling Nov., pg 9
CAD/CAM - 3D software package
Dec. 1990, pg 26
CAD/CAM - Tracking the path to photorealism Nov., pg 9
CAD/CAM - User interface development Feb., pg 6
CAD/CAM - Workstations Aug., pg 10
Cabinet coolers May, pg 39
Calendar Mar., pg 108
Calendar Jan., pg 5
Calendar Feb., pg 24
Calendar Apr., pg 7
Calendar June, pg 19
Calendar Sept., pg 30
Calendar Nov., pg 7
Canadian Fluid Power Association holds semi-annual meeting Feb., pg 8
CANDU nuclear reactors Jan., pg 5
Capacitor device Sept., pg 23
Card drive Feb., pg 24
Careers - Do you need another degree? May, pg 50
Careers - The 1991 job market
Jan., pg 18
Careers - Survival tactics for job security Mar., pg 114
Careers - Do you need another degree? May, pg 50
Careers - Every job hunter should network Aug., pg 22
Careers - Is it time to go on your own? Oct., pg 54
Caliper disc brakes Apr., pg 21
CFPA semi-annual meeting Feb., pg 8
CFPA elects new president and com-

DESIGN ENGINEERING



mittee Aug., pg 5
Cellular switch June, pg 5
Ceramics Jan., pg 7
Ceramics - Design Around the World
June, pg 8
Chart recorder - digital May, pg 38
Circuit board mounting Feb., pg 24
Caps and plugs - threaded May, pg 37
Composites - Super conductive composites from Israel. Design around the world Feb., pg 10
Compressors - rotary vane May, pg 42
Computer documentation Sept., pg 10
Computer protector June, pg 19
Conduit caps May, pg 37
Connectors May, pg 37
Connectors Sept., pg 26
Connector - telecommunications
Apr., pg 20
Connector options June, pg 20
Controller selection for hydraulic motion control systems Feb., pg 19
Controller - automation Aug., pg 17
Controller - infrared Aug., pg 20
Control valves - directional
Mar., pg 108
Controller software Apr., pg 21
Controller, universal June, pg 20
Coolers - cabinet May, pg 38
Copier Sept., pg 23
Couplings - quick connect
Mar., pg 110
Couplings - hydraulic Nov., pg 20
Couplings - drive Apr., pg 20
Clamps - hydraulic line clamps
Jan., pg 15
Clutches and brakes Feb., pg 16
Cylinders - air Apr., pg 21
Cylinders - electronic controller
Jan., pg 15
Cylinders - holding/braking
Sept., pg 27
Cylinders - pneumatic May, pg 41
Cylinders - stainless steel Aug., pg 19
Cylinders - stainless steel body cylinders June, pg 20
Cylinders - pneumatic and hydraulic
Aug., pg 13
Cylinders - tie rod Nov., pg 19

DESIGN ENGINEERING



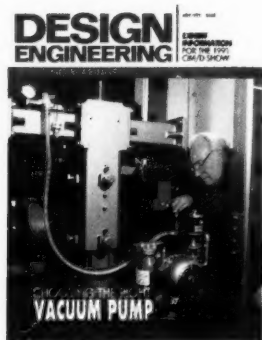
Database - mechanical fasteners
Apr., pg 11
Decelerators - linear Aug., pg 17
Design Around the world
Dec. 1990, pg 8
Design Around the World Feb., pg 10
Design Around the World Mar., pg 10
Design Around the World May, pg 10
Design Around the World June, pg 8
Design Around the World Aug., pg 7
Design Around the World Sept., pg 12
Design Around the World Oct., pg 19
Design Around the World Nov., pg 7
Die casting Apr., pg 14
Die casting awards - Canadian
Apr., pg 18
Die springs Mar., pg 111
Die springs Feb., pg 22
Digital chart recorder May, pg 38
Digital readout Feb., pg 24
Digitizer Nov., pg 19
Digitized drawings Jan., pg 16
Disc brakes - caliper Apr., pg 21
Disk operating system Aug., pg 6
Dispenser - air-powered Aug., pg 18
Dispenser - fluid Nov., pg 1
Drawings - converting to CAD
Mar., pg 6
Drive couplings Apr., pg 20
Drawings - digitized Jan., pg 6
Dynamometers drivehafts Apr., pg 19

E

EMI/RFI filter Mar., pg 111
Elbow fittings Mar., pg 109
Electrical insulation May, pg 38
Electric vehicles Oct., pg 10
Encoders Feb., pg 21
Encoders June, pg 19
Engine - new engine from Scania
Oct., pg 8
Engine - Hydrogen gas powered engine Dec. 1990, pg 8
Electronic imaging - solving storage problems Dec. 1990, pg 10
Engineering resins Sept., pg 16

Environment - disposable filter for protection against chemicals... Jan., pg 5
Exhaust System... May, pg 10

F
Faculty chair to study technological change established at universities Waterloo and Simon Fraser Mar., pg 8
Fasteners - panel May, pg 43
Fastening - ways of fastening hubs to shafts Apr., pg 9
Faston receptacle May, pg 37
Fibre optic receiver Aug., pg 16
Film - thermoplastic, high-temperature film June, pg 20
Fittings - right angle fittings for flexible cords Aug., pg 19
Fibre optic X station family Mar., pg 6
Filters - disposable cartridge filter for environmental control Jan., pg 5
Filters - filter nozzles Feb., pg 23
Flanges - hydraulic May, pg 44
Flow elements May, pg 40
Fluid dispensing components Mar., pg 108
Fluid Power Library Mar., pg 113
Fluid Power and Controls Buyers' Guide Mar., pg 19



G
Gauges - magnetic level gauge Mar., pg 109
Gear inspection centre May, pg 45
Gears - 1991 - a turning point in gear drive market place Nov., pg 16
Gear pumps Apr., pg 21
Gears speed changer Dec. 1990, pg 27
Glue - dispensing Feb., pg 22
Gradiometer Sept., pg 9

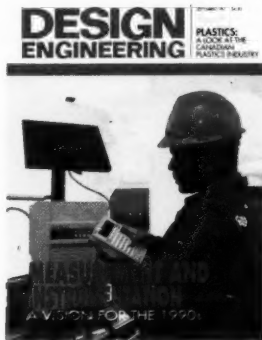
H
Heat exchangers - titanium tubes solve problems Mar., pg 8
Heat sinks - liquid heat sink Mar., pg 111
Heat sink spring clips Mar., pg 110
Heat transfer fluids Apr., pg 21
Hipot test system Mar., pg 109
Hose - polyurethane Aug., pg 18
Hygrometer Dec. 1990, pg 26

I
Indicators - digital process Jan., pg 15
Indicator - liquid level Nov., pg 19
Industrial design Aug., pg 15
Ionizing Transvector Nov., pg 19
Infrared baking - technology from France. Design around the world Feb., pg 10
Instrumentation - measurement and instrumentation for the 1990s Sept., pg 20
Insulation - electrical Dec. 1990, pg 26
Insulation - electrical May, pg 38
Insulation material Sept., pg 24
Infrared detector controllers Aug., pg 20
Instrumentation - thermostat calibration with servo motors Nov., pg 18
Interface board Aug., pg 19
International trade (Viewpoint) Sept., pg 4
Interface development Feb., pg 4
Inverter Aug., pg 17
Image Scanning - solving problems

with electronic imaging Dec. 1990, pg 10

L
Label applicator Feb., pg 23
Laboratory testing of cars and trucks Oct., pg 6
LabWindows Sept., pg 20
Lap top computers Mar., pg 6
Laser alignment system Aug., pg 20
Laser light source Feb., pg 22
Level switch Apr., pg 20
Limit switch Aug., pg 18
Linear actuator May, pg 43
Linear actuator June, pg 20
Linear decelerators Aug., pg 17

M
1991-1992 Mechanical Power Transmission Buyers' Guide Oct., pg 13
Magnetic read switch June, pg 19
Mainframe stability Aug., pg 6
Metals - Dow Magnesium celebrates 75th anniversary June, pg 6
Meters - digital panel Sept., pg 24
Magnesium - Dow Magnesium celebrates 75th anniversary June, pg 5
Manifold valves Sept., pg 20
Marking pen for permanent engraving Sept., pg 28

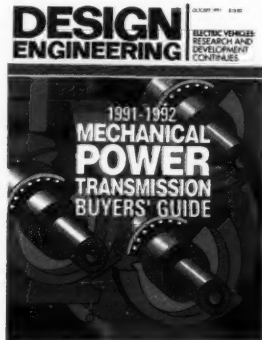


Medical engineering - University of Ottawa forms Institute of Medical Engineering Jan., pg 5
Metal composites Jan., pg 7
Metals and castings Apr., pg 14
Meters - laser powered, energy meters Feb., pg 23
Meters - magnetic flow May, pg 42
Metrology system Aug., pg 7
Microelectronics - continuing R&D paying dividends June, pg 8
Microscopy - breakthrough in microscopy Apr., pg 6
Monitoring system June, pg 19
Monitor Dec. 1990, pg 8
Monitors Apr., pg 7
Monitoring system - UST monitoring system Sept., pg 28
Motion control - controller selection for hydraulic motion control systems Feb., pg 19
Motors June, pg 20
Motor controller Oct., pg 8
Motor Drives - regenerative DC motor drives Mar., pg 15
Moulding resins May, pg 42
Mounting brackets May, pg 38
MMCs and Ceramics Jan., pg 7
Motor design - New design from England. Design around the world Feb., pg 10
Multi-platform CASE solution Jan., pg 8
Multimeter June, pg 19
Multimeter Nov., pg 19

N
NRC conducts water-jet research June, pg 5
Nuclear news - SaskPower - AECL agreement Nov., pg 5
Notebook computer Sept., pg 10
Nozzles - filter nozzles Feb., pg 23
Nuclear reactors Jan., pg 5

O
Oil coolers Nov., pg 20
Oil skimmer Jan., pg 15
Oil from water removal Aug., pg 7
On-line engineering Apr., pg 12

P
PC CAD - addressing UNIX, RISC, MIPS June, pg 17
PC - portable Aug., pg 16
PC serial converter Aug., pg 16
PLC technology Aug., pg 9
Panel fasteners May, pg 43
Pen plotter Aug., pg 1
Pipe/conduit caps May, pg 37
Plastics - more aggressive approach needed to boost Canadian plastics industry Sept., pg 14
Plastics - Plastics in Design Seminar June, pg 5
Plastics - thermoset family Sept., pg 14
Plotters May, pg 44
Plotters - pen Aug., pg 1
Plotters - wall-mounted Mar., pg 109
Plugs - button plugs Sept., pg 26
Plugs - plastic Nov., pg 1
Polycarbonate film Apr., pg 20
Polymers Sept., pg 16
Polyurethane hose Aug., pg 18
Positioner - positioning heavy items May, pg 38
Positioning table for precise positioning June, pg 19
Pre-swagging tool Aug., pg 16
Programmable controller Aug., pg 1
Programmable controllers Aug., pg 9



Project documentation Mar., pg 6
Pro/Engineer to Cimatron 90 Jan., pg 6
Prototype parts - forming by computer Jan., pg 5
Proximity switches June, pg 10
Pumps - gear Apr., pg 21
Pumps - novel design has no moving parts Sept., pg 12
Pumps - vacuum May, pg 14
Pumps - vacuum Aug., pg 18

R
RF signal generator Sept., pg 24
Railway track fatigue Sept., pg 12
Rail road transport system Nov., pg 5
Read switch June, pg 19
Receiver - fibre optic Aug., pg 18
Recorders - digital Mar., pg 38
Relays/counters Aug., pg 16
Relay - electronic Sept., pg 28
Relay - SIP read relay Nov., pg 20
Relay protection - Design Around the World Mar., pg 10
Relay protection Sept., pg 27
Relay, signal June, pg 19
Relay switches Apr., pg 20
Relay - telecommunication Nov., pg 19
Resistance elements Sept., pg 23
Road/rail transport system Nov., pg 5
Robotics - latest development Feb., pg 12
Rod sealing Aug., pg 1
Rotary actuator Apr., pg 21
Rotary valve May, pg 10
Rotary valve Oct., pg 8
Rotors May, pg 40

S
Scale - bench scale Feb., pg 22
Seals - designing for hazardous emissions Jan., pg 9
Seals - low-friction May, pg 44
Seals - non-CFC May, pg 41
Seals, V-seal June, pg 19
Sensors and switches - inductive and capacitive proximity switches June, pg 10
Seismograph for bedrock measurement Aug., pg 7
Servomotors Aug., pg 19

Signal relay June, pg 19
Signal generator Sept., pg 24
Sleeve locks June, pg 20
Slide rule Feb., pg 22
Software - controller Apr., pg 21
Solid fluids - Design Around the World Mar., pg 10
Speed drives Sept., pg 27
Springs - die springs Feb., pg 22
Staffing for short-term engineering assignments Aug., pg 5
Switch - limit Aug., pg 18
Switches - pressure/vacuum Sept., pg 20
Switching device technology May, pg 6
Subsea laser metrology system Aug., pg 7
Suction cups Sept., pg 23
Suction head - Design Around the World Nov., pg 7
Surface inspection process for stamping May, pg 7
Switches - level Apr., pg 20
Switches - pressure Nov., pg 19
Stress measurement - measuring stress in pre-stressed bolts. Design around the world Feb., pg 10

T
Tap - spiral fluted bottoming tap Nov., pg 20
Technical literature Dec. 1990, pg 28
Technical literature Jan., pg 17
Technical literature Mar., pg 112
Technical literature May, pg 48
Technical literature June, pg 21
Technical literature Aug., pg 21
Technical literature Sept., pg 28
Technical literature Nov., pg 21
Telecommunications connector Apr., pg 20
Telephone system June, pg 5
Terminal blocks Feb., pg 24
Thermistors Apr., pg 20
Thermocouple transmitter Apr., pg 21
Tooth clutch Nov., pg 1
Totalizer - programmable, electronic Mar., pg 110
Touch screen driver Sept., pg 10
Transmitters Sept., pg 28
Transmitter - thermocouple Apr., pg 21
Transmitter/receiver Aug., pg 18
Turbocompound engine Oct., pg 8

U
Universal joints May, pg 40
UST monitoring system Sept., pg 26

V
Vacuum pumps May, pg 14
Vacuum pumps Aug., pg 18
Valves - air Aug., pg 19
Valves - ball valves, Design Around the World June, pg 8
Valves - check Nov., pg 1
Valves - manifold Sept., pg 23
Valves - manifold Nov., pg 14
Valves - pressure relief Aug., pg 19
Valves - rotary Oct., pg 8
Valves - hydraulic Nov., pg 13
Valves - proportional Nov., pg 14
Valves - solenoid Dec. 1990, pg 26
Valves - heat transfer piston Dec. 1990, pg 26
Video DAC Mar., pg 111
Viewpoint - surprising facts about Canadian R&D Dec. 1990, pg 4
Viewpoint - It all helps R&D - Apr., pg 5
Viewpoint - Keeping in touch with global technologies Jan., pg 4
Viewpoint - High technology to the fore in Gulf War Feb., pg 4
Viewpoint - Lessons in marketing May, pg 4
Viewpoint - Market driven R&D Mar., pg 4
Viewpoint - Western Canada comes off best June, pg 26
Viewpoint - Toward better engineering Aug., pg 4
Viewpoint - Casting the net wide open for across the pond trading Sept., pg 4
Viewpoint - The road to recovery will bring challenges Oct., pg 4
Viewpoint - International space university could be Ontario-based Nov., pg 4

W
Water-jet research - NRC conducts research program June, pg 5
Workstations - HP PA-RISC-based workstation family Apr., pg 7
Wind tunnel - Design Around the World June, pg 8
Wipers, way Mar., pg 109
Workstations Aug., pg 10